

Application No.: 10/576,588
Amendment Dated: October 4, 2010
Reply to Office Action of: July 2, 2010

MAT-8844US

Remarks/Arguments:

Claims 89, 91-93, 113-116, 126 and 128 have been amended. Claims 129-137 have been added. No new matter is introduced herein. Claim 127 has been cancelled. Of pending claims 89-126 and 128-137, claims 94-112 and 117-125 have been withdrawn.

Claim 89 has been amended to recite that the reply packet transmitter transmits the reply packet to the bubble packet transmitting port by using N different ports (N being an integer of two or more). Claims 113 and 126 have been amended similarly to claim 89. Claim 126 has also been amended to include the features of claim 127. Claim 127 has been cancelled. Support for the amendments to claims 89, 113 and 126 include, for example, page 34, line 17 - page 35, line 11 and Fig. 12 of the subject specification. Claims 89, 91-93, 113-116, 126 and 128 have also been amended for antecedent basis.

The title has been objected to as being nondescriptive. The title has been amended, as suggested by the Examiner on page 2 of the Office Action to recite "BIDIRECTIONAL CONNECTION SETUP BETWEEN ENDPOINTS BEHIND NETWORK ADDRESS TRANSLATORS (NATS)." Accordingly, Applicants respectfully request that the objection to the title be withdrawn.

Claim 90 has been objected to as being of improper dependent form. In particular, it is asserted that claim 90 fails "to further limit the subject matter of a previous claim." On page 3 of the Office Action, it is asserted that a port detection packet will always be transmitted "either before or after the particular event." Applicants respectfully disagree. Claim 90 recites that the port detection packet is transmitted "before and/or after" the bubble packet is transmitted. Thus, claim 90 includes the limitation that the port detection packet is transmitted both before and after the bubble packet is transmitted. Thus, claim 90 further limits the claimed subject matter. Accordingly, Applicants respectfully request that the objection to claim 90 be withdrawn.

Claims 89-93, 113-116 and 126-128 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. In particular, it is asserted that these

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claims lack antecedent basis. Claim 127 has been cancelled. Claims 89, 91-93, 113-116, 126 and 128 have been amended for antecedent basis. Accordingly, Applicants respectfully request that the rejection of these claims under 35 U.S.C. § 112, second paragraph, be withdrawn.

Claims 89-93 and 113-116 have been rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. On pages 6-7 of the Office Action, it is asserted that "the server and components thereof may be entirely software based," based on page 78, last paragraph - page 83, last paragraph of the subject specification. Applicants respectfully disagree. The subject specification only recites that "the constituent elements may be composed of exclusive hardware, or constituent elements that can be realized by the software by program control." (Page 78, lines 16-18 of the subject specification.) Furthermore, Applicants note that claims 89 and 113 recite specific structure such as processors, receivers, transmitters and detectors. Applicants also note that, on page 5 of the Office Action, the Examiner agrees that method claim 126 (which is similar to claim 113) "requires the use of TCP or UDP ... resulting in the claim being tied to a particular machine." Thus, Applicants submit that claims 89 and 113 recite specific structure and are statutory. Accordingly, Applicants respectfully request that the rejection of claims 89-93 and 113-116 under 35 U.S.C. § 101 be withdrawn.

Claims 113-116 and 126-128 have been provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1 and 3-7 of co-pending U.S. application 11/510,487. It is submitted that, because this is a provisional rejection, Applicants are not required to substantively respond to this provisional rejection until the cited application issues and the rejection is thus, no longer provisional.

Claims 89-93, 113-116 and 126-128 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Takeda (US 2004/0139228, referred to herein as "Takeda"). Claim 127 has been cancelled. It is respectfully submitted, however, that the remaining claims are patentable over the cited art for the reasons set forth below.

Claim 89, as amended, includes features neither disclosed nor suggested by the cited art, namely:

... a bubble packet transmitting port information receiver for receiving bubble packet transmitting port information showing the position of the bubble packet transmitting port ...

... a bubble packet transmitting port transmitter for transmitting the bubble packet transmitting port information to the second information processor ...

... wherein the reply packet transmitter transmits the reply packet to the bubble packet transmitting port by using N different ports (N being an integer of 2 or more) ... (Emphasis added)

Claims 113 and 126 include similar recitations.

Takeda discloses, in Fig. 16A, a communication system including endpoint server 629 and browser 630 connected to IP network 1606 via respective NATs 1602, 1604. (Paragraphs [0190-0191].) Endpoint server 629 and browser 630 communicate with NAT-discovery server 622 to determine the respective address/port pair (for example, respective port IDs, 50012, 49152) via paths 1607A, 1607B. (Paragraph [0192].) As shown in Fig. 16B, endpoint server 629 can send prediction-based breakout packets (BOPs) from one of its ports to multiple ports of NAT 1604. (Paragraph [0194-0195].) As shown in Fig. 16C, browser 630 can then send a BOP from one of its ports to multiple ports of NAT 1602. (Paragraphs [0199-0200].) As shown in Figs. 19A-19C, Takeda teaches that browser 630 sends a single BOP to endpoint server 629, indicated by path 1918. (Paragraphs [0221-0225].)

However, Takeda does not disclose or suggest a reply packet transmitter that transmits the reply packet to the bubble transmitting port (of the first information processor) by using N different ports, where N is an integer of two or more, as required by claim 89 (emphasis added). Takeda is silent regarding this feature. In Fig. 19B of Takada, the corresponding breakout packet (i.e. a reply packet) is a single packet. In contrast, Applicants' claim includes plural reply packets that are transmitted to the bubble packet transmitting port by using multiple different ports. For example, as shown in Applicants' Fig. 12, plural reply packets are transmitted to

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bubble packet transmitting port P13. Applicants claimed communication system also includes an advantage over Takeda. In Takeda, a single reply packet has a higher possibility of not being accepted at the target terminal when the port status is changed. In contrast, according to Applicants' invention, because plural reply packets are transmitted (from plural ports), one of the reply packets may be accepted at the target terminal even when the port status has changed. Thus, Takeda does not include all of the features or the advantages of Applicants' claim 89. Accordingly, allowance of claim 89 is respectfully requested.

Although not identical to claim 89, claims 113 and 126 include features similar to claim 113 which are neither disclosed nor suggested by the cited art. Accordingly, allowance of claims 113 and 126 is respectfully requested for at least the same reasons as claim 89.

Claims 90-93, 114-116 and 128 include all of the features of respective claims 89, 113 and 126 from which they depend. Accordingly, these claims are also patentable over the cited art for at least the same reasons as respective claims 89, 113 and 126.

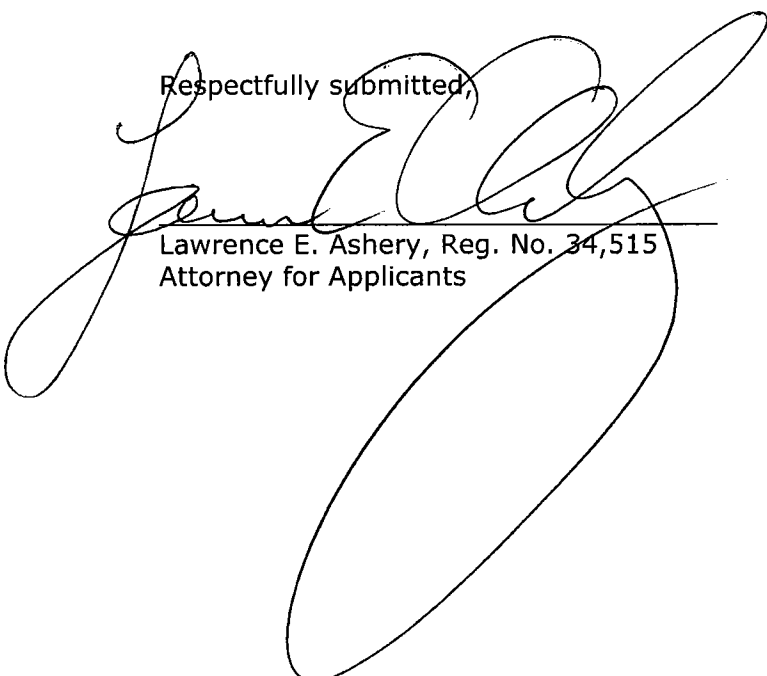
Claims 129-137 have been added. No new matter is introduced herein. Basis for claims 129-137 include, for example, page 32, line 20 - page 33, line 8 of the subject specification. Claims 129-137 include all of the features of respective claims 89, 113 and 126 from which they depend. Accordingly, claims 129-131 are also patentable over the cited art by virtue of their dependency upon respective claims 89, 113 and 126.

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In view of the amendments and arguments set forth above, the above-identified application is in condition for allowance which action is respectfully requested.

Respectfully submitted,



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